Introduction

The U.S. Department of Energy, Office of River Protection (DOE) has contracted Bechtel National, Inc. (BNI) to manage the workscope under the contract DE-AC27-01RV14136, for the completion of design, performance of construction, and commissioning of the Hanford Waste Treatment and Immobilization Plant (WTP).

The WTP is comprised of four major elements, pretreatment, Low-Activity Waste (LAW) immobilization, High-Level Waste (HLW) immobilization, and balance of facilities.

To accomplish this mission and to ensure stakeholders expectations of product quality, BNI has developed this Quality Assurance Program. This program will govern all work performed at the WTP, including work performed by BNI WTP subcontractors. The Quality Assurance Program is supported by the Quality Assurance Manual, and procedures, instructions, and guidance documents that implement the program.

1.3.5 Organization

The Project Manager is responsible for the proper execution of the QAP and all work under the contract and are is directly responsible for the performance of the work undertaken by both the Project and subcontractors. BNI retains overall responsibility for the execution of the work under the contract and the overall implementation of the QAP. The project management organization for the project is shown in Figure 1-3.

The central point of Project control rests with each Area Manager. The Functional Managers provide the resources to accomplish the Project activities identified by the Area Managers. This is graphically displayed in Figure 1-3.

1.4. Responsibilities

Project Personnel

Are responsible for:

- The quality and the improvement of quality in his/her own work
- Implementation of the QAP as related to their work

The Project Manager

- 1. Has full authority to represent and commit the RPP-WTP Project Team on all matters related to the fulfillment of the contract obligations.
- 2. Is the senior manager responsible for development, implementation, and compliance with the Project's policies and implementing documents.
- 3. The relationship between the Project Manager and the WTP QA Manager is one of project coordination and QA support.

- Safety
- Overall implementation of the QAP
- Planning and completing an annual review of the overall effectiveness of the management assessments.
- Leading the RPP-WTP team in planning and implementing the contract and work scope
- Setting goals and objectives
- Providing necessary and sufficient program resources
- Providing a link to corporate policies and their application across the business
- Developing, authorizing, and releasing the Project Quality Policy statement
- All aspects of safety and environmental compliance, quality, and operations
- Project management, integration, direction, and performance based on the scope of work, agreed-on DOE top-level standards and principles, and project policies and procedures
- Establishing and maintaining external interface controls for the project
- Approval of the QAP and assigns each project team manager, and their assigned personnel, the responsibility and accountability for implementation of the QAP and the implementing procedures
- Providing the overall project and contract strategy
- Establishment and maintenance of the technical, cost, and schedule baseline
- Overall management of the Project
- Ensuring appropriate integration of the project activities with related safety and business functions
- The adequate provision and management of all project technical, engineering, and construction resources, systems, practices, procedures, standards, and quality control
- The provision and management of Project Control and Administration systems
- Assigns the Chair and Deputy Chair positions for of the Project Management Integrated Process/Product Team

Certifications include identification of the person and specific activities, experience, previous training, capability demonstrations and test results (as required), signature of the designated person responsible for certification, certification date, and date of expiration.

When special processes (as defined by the contract or regulation) are subcontracted, the appropriate requirements for the activity are included in the procurement documents in accordance with Section 7.0, "Procurement".

2.3 Responsibilities

All Managers

Are responsible for:

- Committing resources and provide training to Project personnel performing activities that affect quality within their organizations
- Establishing training requirements for Project personnel based on the position descriptions
- Review job responsibilities and scope-of-work assignments to ensure that the training program is maintained current with work assignments and is updated to improve overall work performance
- Staff recruitment and training

The Project Manager

Is responsible for:

- Assigning qualified personnel to perform project tasks. Personnel selected to perform work shall
 have the experience and ability to provide the necessary quality performance as defined by position
 descriptions
- Establishing training requirements for project personnel and for instructors, based on the position descriptions
- Reviewing job responsibilities and scope-of-work assignments to ensure that the training program is maintained current with work assignments and is updated to improve overall work performance

The Operations Manager

Is responsible for:

- Training department activities and implementation, control, and maintenance of the training matrix for tracking training of personnel and for determining the status of the training program
- Processes for personnel training, qualification, and certification
- Establishing training requirements for project personnel and instructors based on the position descriptions
- Control and maintenance of training and certification records as required until turnover to the project records management system

The Human Resources Business/Project Controls Manager

- Coordination of the hiring of qualified personnel to meet position requirements
- Assignment of qualified personnel to perform project tasks
- Maintaining position descriptions

6.2.14 Design Changes

All changes to final design, included those initiated by field changes, modifications, and nonconforming items that have a disposition of "use-as-is" or "repair" shall be justified and subject to controlled measures commensurate with those applied to the original design. If changes to previously verified designs have been made, design verification is required for the changes. This includes evaluation of the effects of those changes on the overall design and on any design analysis on which the design is based. This control shall include assurances that the design and safety analysis of the items remain valid. Temporary modifications shall receive the same levels of control as the permanent modifications.

6.3 Responsibilities

The Project Manager

Is responsible for:

• Ensuring the adequacy of the arrangements implemented by the project team members regarding the design and supporting activities

The Engineering Manager

- The overall design control process including the following:
 - Chair of the Technical Committee
 - Review and oversight of engineering efforts performed on project teams
 - Providing the interface to access historical design information for use on the project
 - The establishment and maintenance of the overall technical baseline on behalf of the Project Manager
 - Preparation of the DOE requested Trade Studies
 - Establishing interface controls for data collection activities
 - Establishing technical requirements with DOE
 - Control of engineering software applications
 - Develop design criteria document
 - Coordinating external contracted technical resources for resolution of design and technical issues
 - Conduct or technical reviews
 - Support external review and interface requirements.
 - Ensure quality and performance of the operational plant is achieved with minimum lifetime costs.
 - Provide the Basis of design and design philosophy documents including the establishment of design requirements and standards
 - Coordinating external contractors to establish engineering/design standards for definitive design
 - Chair of the Design Committee
 - Establishing interface controls for design activities
 - Ensure technical adequacy of design and design processes
 - The establishment and enforcement of Standardization principles between the various facilities

- Coordinating information and technical issue resolution with Engineering Manager, supervisors, and engineers
- Preparation and updates of the applicable documents identified in Appendix B, "Application of Quality Assurance Program Requirements for QL-1, QL-2, and QL-3 Structures, Systems, and Components"
- Planning for verification that design criteria have been met
- Establishing a plan for independent verification of design products
- Documenting and approving design plans
- Reviewing progress of assigned engineering staff on their scope of work, design deliverables, budgets, and schedules
- Coordination of assigned engineering staff on project work to ensure an integrated project design is produced
- Defining project organization and assignment of work to assigned engineering staff
- Monitoring work progress to ensure that design is being carried out as required to satisfy technical, operational, quality, safety, and environmental commitments
- Supporting the implementation of cost effective standardization
- Preparation and update of all design documents
- Ensuring that design control procedures are implemented for the performance and control of design activities
- Performing design activities in accordance with approved project procedures
- Verifying that design and technical reviews are conducted in accordance with QAP requirements
- Establishing measures for controlling technical modifications to the IHLW form production process, including process control plans and other implementing documents

The Area Project Managers

Within their specific area, are responsible for:

- Defining the project scope of work, design deliverables, budgets and schedules
- All aspects including safety, quality, cost, and schedules performance

The WTP QA Manager

- Reviewing design plans (as applicable) before their approval to verify incorporation of appropriate QA provisions and compliance to procedures
- Assessing the design control process to ensure the adequacy and satisfactory implementation of the design procedures
- Participating in design reviews, as required
- Reviewing results of technical and design reviews for compliance with QAP requirements
- Evaluating subcontractors' design control programs